1 Capsule summary of commands

This section contains one-line descriptions of the primitive TEX commands and the TEX commands defined in plain TEX. These include both control sequences and special characters. We've omitted those commands that are only intended for internal use in the plain TEX definition (Appendix B of *The TEXbook*). Note that ordinary characters such as '`a`' or '`6`' are also commands, and indeed the most common ones (see "character", p. '`character`').

To keep the descriptions brief, we've adopted certain conventions:

- An asterisk in front of a command indicates that the command is primitive, i.e., built into the TEX computer program (see "primitive", p. '`primitive`').
- The words "music", "punctuation", "function", "symbol", "relation", "delimiter", or "operator" in a command description imply that the command is only legal in math modes.
- The verb "display" applies to information that TEX sends to the log file, unless otherwise indicated. If `\tracingonline` is positive, TEX also sends that output to the terminal. We use the noun "display" to refer to math displays (see p. '`display+math`'), i.e., material between `$$`'s.
- The phrase "produce x" indicates that the command will typeset x and put the result in a box. We sometimes omit "produce" when the omission is unlikely to cause confusion. For example, we describe `\alpha` as "math Greek letter α", not "produce the math Greek letter α".

`*\␣` interword space (p. '`\@space`')
`\!` negative thin space for math (p. '`\@shriek`')

\" umlaut accent for text, as in ö (p. '\@quote')
introduce a macro parameter, or indicate where the text of an entry goes in an alignment preamble (p. '@msharp', p. '@asharp')
\# produce # character from current font (p. '\@pound')
$ begin or end a math formula (p. 'mathform')
\$ produce $ character from current font (p. '\@bucks')
* % begin a comment (p. 'comments')
\% produce % character from current font (p. '\@percent')
& separate templates and entries in an alignment (p. '@and')
\& produce & character from current font (p. '\@and')
' prime symbol for math, as in p' (p. '@prime')
\' acute accent for text, as in é (p. '\@prime')
* multiplication symbol that allows a line break (p. '\@star')
\+ begin tabbed line (p. '\@plus')
\, thin space for math (p. '\@comma')
*\- specify a legal hyphenation point (p. '\@minus')
\. dot accent for text, as in ṅ (p. '\@dot')
*\/ italic correction for the previous character (p. '\@slash')
\; thick space for math (p. '\@semi')
\= macron accent for text, as in r̄ (p. '\@equal')
* \ begin a control sequence (p. '@backslash')
\> medium space for math (p. '\@greater')
^ produce a specified subformula as a superscript (p. '@hat')
\^ circumflex accent for text, as in ô (p. '\@hat')
^^L equivalent to the \par primitive (p. '\@par')
*^^M an end-of-line (p. '@newline')
_ produce a specified subformula as a subscript (p. '@underscore')
_ underscore: _ (p. '\@underscore')
\` grave accent for text, as in è (p. '\@lquote')
{ start a group (p. '@lbrace')
\{ left brace delimiter for math: { (p. '\@lbrace')
\| parallel lines for math: ‖ (p. '\@bar')
} end a group (p. '@rbrace')
\} right brace delimiter for math: } (p. '\@rbrace')
~ interword space at which a line will not break (p. '@not')
\~ tilde accent for text, as in ã (p. '\@not')
\aa Scandinavian letter: å (p. '\aa')
\AA Scandinavian letter: Å (p. '\AA')
*\above produce a fraction with a bar of specified thickness (p. '\above')

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*\abovedisplayshortskip glue TEX inserts before a display when the previous line fits in the display's indentation, by default 0 pt plus 3 pt (p. '\abovedisplayshortskip')

*\abovedisplayskip glue TEX inserts before a display when the previous line doesn't fit in the display's indentation, by default 12 pt plus 3 pt minus 9 pt (p. '\abovedisplayskip')

*\abovewithdelims produce a fraction with a bar of specified thickness and surrounded by specified delimiters (p. '\abovewithdelims')

*\accent put specified accent over the next character (p. '\accent')

\active category code for active characters, viz., the number 13 (p. '\active')

\acute acute accent for math, as in $\acute{x}$ (p. '\acute')

*\adjdemerits additional demerits for a line break which would result in adjacent lines with incompatible word spacing, by default 10000 (p. '\adjdemerits')

*\advance add a number to a \count register (p. '\advance')

\advancepageno if \pageno is positive, add one; if it's negative, subtract one (p. '\advancepageno')

\ae æ ligature (p. '\ae')

\AE Æ ligature (p. '\AE')

*\afterassignment wait to expand the following token until the next assignment is done (p. '\afterassignment')

*\aftergroup wait to expand the following token until the end of the current group (p. '\aftergroup')

\aleph only Hebrew letter for math: $\aleph$ (p. '\aleph')

\allowbreak do \penalty0, i.e., allow a line or page break where one could not ordinarily occur (p. 'hallowbreak', p. 'vallowbreak')

\alpha math Greek letter α (p. '\alpha')

\amalg amalgamation operator: $\amalg$ (p. '\amalg')

\angle angle symbol: $\angle$ (p. '\angle')

\approx approximation relation: $\approx$ (p. '\approx')

\arccos arc cosine function: arccos (p. '\arccos')

\arcsin arc sine function: arcsin (p. '\arcsin')

\arctan arc tangent function: arctan (p. '\arctan')

\arg argument (phase) function: arg (p. '\arg')

\arrowvert vertical portion of an extensible double arrow (p. '\arrowvert')

\Arrowvert vertical portion of an extensible single arrow (p. '\Arrowvert')

\ast asterisk operator: $*$ (p. '\ast')

\asymp asymptote relation: $\asymp$ (p. '\asymp')

*\atop produce a fraction without a fraction bar (p. '\atop')

*\atopwithdelims produce a fraction without a fraction bar and surrounded by specified delimiters (p. '\atopwithdelims')

\b bar-under accent for math, as in $\underline{x}$ (p. '\b')

\backslash backslash symbol: \ (p. '\backslash')

*\badness the badness of the glue setting in the last box made (p. '\badness')

\bar bar accent for math, as in $\bar{x}$ (p. '\bar')

*\baselineskip glue for the normal vertical distance from one baseline to the next, by default 12 pt (p. '\baselineskip')

*\batchmode don't stop at errors and don't output to terminal (p. '\batchmode')

*\begingroup start a group to be ended by \endgroup (p. '\begingroup')

\beginsection begin a major subdivision of a document (p. '\@beginsection')

*\belowdisplayshortskip glue TEX inserts after a display when the previous line fits in the display's indentation, by default 7 pt plus 0.3 pt minus 4 pt (p. '\belowdisplayshortskip')

*\belowdisplayskip glue TEX inserts after a display when the previous line doesn't fit in the display's indentation, by default 12 pt plus 3 pt minus 9 pt (p. '\belowdisplayskip')

\beta math Greek letter β (p. '\beta')

\bf use boldface, i.e., do \tenbf\fam=\bffam (p. '\bf')

\bffam boldface family for math (p. '\bffam')

\bgroup implicit beginning-of-group character (p. '\bgroup')

\big make the specified delimiter larger than an ordinary one, but still small enough for text (p. '\big')

\Big make the specified delimiter about 11.5 pt tall (p. '\Big')

\bigbreak indicate desirable page break with \penalty-200 and produce \bigskipamount glue (p. '\bigbreak')

\bigcap large cap operator (no, it doesn't produce a large capital letter!): $\bigcap$ (p. '\bigcap')

\bigcirc large circle operator: $\bigcirc$ (p. '\bigcirc')

\bigcup large cup operator: $\bigcup$ (p. '\bigcup')

\bigg make the specified delimiter about 14.5 pt tall (p. '\bigg')

\Bigg make specified delimiter about 17.5 pt tall (p. '\Bigg')

\biggl sized like \bigg, but spaced as an opening (p. '\biggl')

\Biggl sized like \Bigg, but spaced as an opening (p. '\Biggl')

\biggm sized like \bigg, but spaced as a relation (p. '\biggm')

\Biggm sized like \Bigg, but spaced as a relation (p. '\Biggm')

\biggr sized like \bigg, but spaced as a closing (p. '\biggr')

\Biggr sized like \Bigg, but spaced as a closing (p. '\Biggr')

\bigl sized like \big, but spaced as an opening (p. '\bigl')

`\Bigl` sized like `\Big`, but spaced as an opening (p. '`\Bigl`')

`\bigm` sized like `\big`, but spaced as a relation (p. '`\bigm`')

`\Bigm` sized like `\Big`, but spaced as a relation (p. '`\Bigm`')

`\bigodot` large circled dot operator: $\bigodot$ (p. '`\bigodot`')

`\bigoplus` large circled plus operator: $\bigoplus$ (p. '`\bigoplus`')

`\bigotimes` large circled times operator: $\bigotimes$ (p. '`\bigotimes`')

`\bigr` sized like `\big`, but spaced as a closing (p. '`\bigr`')

`\Bigr` sized like `\Big`, but spaced as a closing (p. '`\Bigr`')

`\bigskip` produce `\bigskipamount` glue (p. '`\bigskip`')

`\bigskipamount` glue for a big vertical skip, by default 12 pt plus 4 pt minus 4 pt (p. '`\bigskipamount`')

`\bigsqcup` large square cup operator: $\bigsqcup$ (p. '`\bigsqcup`')

`\bigtriangledown` triangle operator pointing downward: $\bigtriangledown$ (p. '`\bigtriangledown`')

`\bigtriangleup` triangle operator pointing upward: $\bigtriangleup$ (p. '`\bigtriangleup`')

`\biguplus` large cupped plus operator: $\biguplus$ (p. '`\biguplus`')

`\bigvee` large logical "or" operator: $\bigvee$ (p. '`\bigvee`')

`\bigwedge` large logical "and" operator: $\bigwedge$ (p. '`\bigwedge`')

`*\binoppenalty` additional penalty for breaking after a binary math operator, by default 700 (p. '`\binoppenalty`')

`\bmod` modulus operator, as in $n \bmod 2$ (p. '`\bmod`')

`\bordermatrix` produce matrix with labelled rows and columns (p. '`\bordermatrix`')

`\bot` lattice bottom symbol: $\bot$ (p. '`\bot`')

`*\botmark` the last mark item on the page just boxed (p. '`\botmark`')

`\bowtie` bowtie relation: $\bowtie$ (p. '`\bowtie`')

`*\box` append the box in a specified box register to the current list, and void the register (p. '`\box`')

`*\boxmaxdepth` maximum depth of vboxes, by default `\maxdimen` (p. '`\boxmaxdepth`')

`\brace` `$n\brace k$` produces braced notation: $\left\{{n \atop k}\right\}$ (p. '`\brace`')

`\bracevert` vertical portion of extensible large brace (p. '`\bracevert`')

`\brack` `$n\brack k$` produces bracketed notation: $\left[{n \atop k}\right]$ (p. '`\brack`')

`\break` do `\penalty-10000`, i.e., force a line or page break (p. '`hbreak`', p. '`vbreak`')

`\breve` breve accent for math, as in $\breve{x}$ (p. '`\breve`')

`*\brokenpenalty` penalty for line break at a discretionary item, by default 100 (p. '`\brokenpenalty`')

`\buildrel` produce specified formula over the specified relation (p. '`\buildrel`')

`\bullet` bullet operation: $\bullet$ (p. '`\bullet`')

`\bye` `\vfill` the last page with blank space, `\supereject` it, and `\end` the job (p. ‘`\@bye`’)

`\c` cedilla accent for text, as in ç (p. ‘`\c`’)

`\cal` use calligraphic font for uppercase letters in math, as in $\mathcal{XYZ}$ (p. ‘`\cal`’)

`\cap` cap operator: $\cap$ (p. ‘`\cap`’)

`\cases` produce cases for math, as in $\left\{ \begin{smallmatrix} \cdots \\ \cdots \end{smallmatrix} \right.$ (p. ‘`\cases`’)

*`\catcode` the category code of a specified character (p. ‘`\catcode`’)

`\cdot` centered dot operator: $\cdot$ (p. ‘`\cdot`’)

`\cdotp` centered dot punctuation: $\cdot$ (p. ‘`\cdotp`’)

`\cdots` centered dots for math: $\cdots$ (p. ‘`\cdots`’)

`\centerline` produce line with its text centered (p. ‘`\centerline`’)

*`\char` produce the character from the current font with the specified code (p. ‘`\char`’)

*`\chardef` define a specified control sequence to be a character’s code, a number between 0 and 255 (p. ‘`\chardef`’)

`\check` check accent for math, as in $\check{x}$ (p. ‘`\check`’)

`\chi` math Greek letter χ (p. ‘`\chi`’)

`\choose` `$n\choose k$` produces combinatorial notation: $\binom{n}{k}$ (p. ‘`\choose`’)

`\circ` circle operation: $\circ$ (p. ‘`\circ`’)

*`\cleaders` produce leaders with half of leftover space before the first box, and half after the last (p. ‘`\cleaders`’)

`\cleartabs` clear all the tabs for tabbing alignments (p. ‘`\cleartabs`’)

*`\closein` close a specified input stream (p. ‘`\closein`’)

*`\closeout` close a specified output stream (p. ‘`\closeout`’)

*`\clubpenalty` additional penalty for a single line remaining before a page break, by default 150 (p. ‘`\clubpenalty`’)

`\clubsuit` club suit symbol: $\clubsuit$ (p. ‘`\clubsuit`’)

`\colon` colon punctation symbol for math: : (p. ‘`\colon`’)

`\cong` congruence relation: $\cong$ (p. ‘`\cong`’)

`\coprod` coproduct operator: $\coprod$ (p. ‘`\coprod`’)

*`\copy` like `\box`, but don’t void the register (p. ‘`\copy`’)

`\copyright` copyright mark: © (p. ‘`\copyright`’)

`\cos` cosine function: cos (p. ‘`\cos`’)

`\cosh` hyperbolic cosine function: cosh (p. ‘`\cosh`’)

`\cot` cotangent function : cot (p. ‘`\cot`’)

`\coth` hyperbolic cotangent function: coth (p. ‘`\coth`’)

*`\count` the specified integer register (p. ‘`\count`’)

*`\countdef` define a specified control sequence to be a number corresponding to a `\count` register (p. ‘`\countdef`’)

*`\cr` end a row (or column) within an alignment (p. ‘`\cr`’)

*\crcr does nothing if the last command was \cr or \noalign; otherwise, equivalent to \cr (p. '\crcr')

\csc cosecant function: csc (p. '\csc')

*\csname start a control sequence name to be ended by \endcsname (p. '\csname')

\cup cup operator: ∪ (p. '\cup')

\d underdot accent for text, as in ṛ (p. '\d')

\dag dagger symbol for text: † (p. '\dag')

\dagger dagger operator for math: † (p. '\dagger')

\dashv right turnstile relation: ⊣ (p. '\dashv')

*\day current day of the month, as a number (p. '\day')

\ddag double dagger symbol for text: ‡ (p. '\ddag')

\ddagger double dagger operator for math: ‡ (p. '\ddagger')

\ddot double dot accent for math: $\ddot{x}$ (p. '\ddot')

\ddots diagonal dots for math: $\ddots$ (p. '\ddots')

*\deadcycles number of \output initiations since the last \shipout (p. '\deadcycles')

*\def define a control sequence to be a macro (p. '\def')

*\defaulthyphenchar default hyphenation character code (p. '\defaulthyphenchar')

*\defaultskewchar default accent skewing character code (p. '\defaultskewchar')

\deg degree function: deg (p. '\deg')

*\delcode the delimiter code of a specified character (p. '\delcode')

*\delimiter produce a specified delimiter (p. '\delimiter')

*\delimiterfactor 1000 times the ratio of the minimum size of a delimiter to the size that would completely cover the formula, by default 901 (p. '\delimiterfactor')

*\delimitershortfall minimum difference between formula height and delimiter height, by default 5 pt (p. '\delimitershortfall')

\delta math Greek letter δ (p. '\delta')

\Delta math Greek letter Δ (p. '\Delta')

\det determinant function: det (p. '\det')

\diamond diamond operator: ⋄ (p. '\diamond')

\diamondsuit diamond suit symbol: ♢ (p. '\diamondsuit')

\dim dimension function: dim (p. '\dim')

*\dimen the specified dimension register (p. '\dimen')

*\dimendef define a specified control sequence to be a number corresponding to a \dimen register (p. '\dimendef')

*\discretionary specify three texts, the first two for before and after a line break, the third for no line break (p. '\discretionary')

*\displayindent TEX sets this to the indentation of a display (p. '\displayindent')

*\displaylimits place limits above and below operators only in display styles (p. '\displaylimits')

\displaylines produce specified multiline display with each line centered (p. '\displaylines')

*\displaystyle use displaystyle size in a formula (p. '\displaystyle')

*\displaywidowpenalty penalty for a single line beginning a page just before a display, by default 50 (p. '\displaywidowpenalty')

*\displaywidth TEX sets this to the width of a display (p. '\displaywidth')

\div division operator: ÷ (p. '\div')

*\divide divide a specified \count register by a specified integer (p. '\divide')

\dot dot accent for math, as in $\dot{x}$ (p. '\dot')

\doteq dotted equality relation: $\doteq$ (p. '\doteq')

\dotfill fill enclosing horizontal space with dots (p. '\dotfill')

\dots ellipsis for sequences: $x_1, \ldots, x_n$ (p. '\dots')

*\doublehyphendemerits demerits for two consecutive lines ending with hyphens, by default 10000 (p. '\doublehyphendemerits')

\downarrow relation: ↓ (p. '\downarrow')

\Downarrow relation: ⇓ (p. '\Downarrow')

\downbracefill fill enclosing hbox with a downwards facing brace: ⏟ (p. '\downbracefill')

*\dp the depth of the box in a specified box register (p. '\dp')

*\dump end the job and produce a format file (p. '\dump')

*\edef define a control sequence to be a macro, immediately expanding the replacement text (p. '\edef')

\egroup implicit end-of-group character (p. '\egroup')

\eject end current paragraph and force a page break, stretching out current page (p. '\eject')

\ell script letter for math: ℓ (p. '\ell')

*\else false or default case alternative for a conditional (p. '\@else')

*\emergencystretch additional stretch added to every line if \tolerance is not satisfied (p. '\emergencystretch')

\empty macro that expands to nothing (p. '\empty')

\emptyset empty set symbol: $\emptyset$ (p. '\emptyset')

*\end \output the last page and end the job (p. '\end')

*\endcsname end a control sequence name started by \csname (p. '\endcsname')

\endgraf equivalent to the \par primitive (p. '\endgraf')

*\endgroup end a group started by \begingroup (p. '\endgroup')

*\endinput terminate input from the current file (p. '\endinput')

`\endinsert` end insertion (p. '`\endinsert`')

`\endline` equivalent to the `\cr` primitive (p. '`\endline`')

`*\endlinechar` character TEX inserts at the end of each input line, by default `^^M` (p. '`\endlinechar`')

`\enskip` horizontal glue with width 1/2 em (p. '`\enskip`')

`\enspace` kern 1/2 em (p. '`\enspace`')

`\epsilon` math Greek letter ϵ (p. '`\epsilon`')

`\eqalign` produce specified multiline display whose indicated parts are vertically aligned (p. '`\eqalign`')

`\eqalignno` produce specified multiline display with equation numbers whose indicated parts are vertically aligned (p. '`\eqalignno`')

`*\eqno` put a specified equation number on the right of a display (p. '`\eqno`')

`\equiv` equivalence relation: $\equiv$ (p. '`\equiv`')

`*\errhelp` token list whose expansion TEX displays when the user asks for help in response to an `\errmessage` (p. '`\errhelp`')

`*\errmessage` give specified error message (p. '`\errmessage`')

`*\errorcontextlines` the number of lines of context TEX displays at an error, by default 5 (p. '`\errorcontextlines`')

`*\errorstopmode` stop for interaction at error messages (p. '`\errorstopmode`')

`*\escapechar` character with which TEX precedes control sequence names that are displayed (p. '`\escapechar`')

`\eta` math Greek letter η (p. '`\eta`')

`*\everycr` token list TEX expands after a `\cr`, or a `\crcr` not following `\cr` or `\noalign` (p. '`\everycr`')

`*\everydisplay` token list TEX expands when a math display begins (p. '`\everydisplay`')

`*\everyhbox` token list TEX expands when an hbox begins (p. '`\everyhbox`')

`*\everyjob` token list TEX expands when a job begins (p. '`\everyjob`')

`*\everymath` token list TEX expands when text math mode begins (p. '`\everymath`')

`*\everypar` token list TEX expands when a paragraph begins (p. '`\everypar`')

`*\everyvbox` token list TEX expands when a vbox begins (p. '`\everyvbox`')

`*\exhyphenpenalty` additional penalty for a line break after an explicit hyphen, by default 50 (p. '`\exhyphenpenalty`')

`\exists` "there exists" symbol: $\exists$ (p. '`\exists`')

`\exp` exponential function: exp (p. '`\exp`')

`*\expandafter` expand the next token only after expanding the token following it (p. '`\expandafter`')

*\fam font family TEX uses for characters with class seven (i.e., variables) in math (p. '\fam')
*\fi end a conditional (p. '\@fi')
\filbreak force a page break unless the text up to another \filbreak also fits on the page (p. '\filbreak')
*\finalhyphendemerits penalty for the second to last line breaking at a hyphen, by default 5000 (p. '\finalhyphendemerits')
*\firstmark first mark item on the page just boxed (p. '\firstmark')
\fivebf use 5-point bold font, cmbx5 (p. '\fivebf')
\fivei use 5-point math italic font, cmmi5 (p. '\fivei')
\fiverm use 5-point roman font, cmr5 (p. '\fiverm')
\fivesy use 5-point symbol font, cmsy5 (p. '\fivesy')
\flat flat symbol for music: ♭ (p. '\flat')
*\floatingpenalty penalty for insertions that are split across pages, by default 0 (p. '\floatingpenalty')
\fmtname name of the current format (p. '\fmtname')
\fmtversion version number of the current format (p. '\fmtversion')
\folio produce \pageno as characters; in roman numerals if it's negative (p. '\folio')
*\font define a specified control sequence to select a font (p. '\font')
*\fontdimen a specified parameter of a specified font (p. '\fontdimen')
*\fontname produce the filename of a specified font as characters (p. '\fontname')
\footline token list that produces line at the bottom of each page (p. '\footline')
\footnote produce a specified footnote with a specified reference mark (p. '\footnote')
\forall "for all" symbol: ∀ (p. '\forall')
\frenchspacing make interword spacing independent of punctuation (p. '\frenchspacing')
\frown frown relation: ⌢ (p. '\frown')
*\futurelet assign the third following token to a specified control sequence, then expand the second following token (p. '\futurelet')
\gamma math Greek letter γ (p. '\gamma')
\Gamma math Greek letter Γ (p. '\Gamma')
\gcd greatest common denominator function: gcd (p. '\gcd')
*\gdef equivalent to \global\def, i.e., globally define a macro (p. '\gdef')
\ge greater than or equal relation: ≥ (p. '\ge')
\geq equivalent to \ge (p. '\geq')
\gets gets relation: ← (p. '\gets')
\gg much greater than relation: ≫ (p. '\gg')

*\global make the following definition global (p. '\global')
*\globaldefs overrides \global prefixes on assignments (p. '\globaldefs')
\goodbreak indicate desirable page break with \penalty-500 (p. '\goodbreak')
\grave grave accent for math, as in $\grave{x}$ (p. '\grave')
\H Hungarian umlaut accent for text, as in ő (p. '\H')
*\halign align text in columns (p. '\halign')
\hang indent the current paragraph by \parindent (p. '\hang')
*\hangafter starting line number for hanging indentation (p. '\hangafter')
*\hangindent space for hanging indentation (p. '\hangindent')
\hat hat accent for math, as in $\hat{x}$ (p. '\hat')
*\hbadness badness threshold for reporting underfull or overfull hboxes, by default 1000 (p. '\hbadness')
\hbar math symbol: $\hbar$ (p. '\hbar')
*\hbox produce a specified hbox (p. '\hbox')
\headline token list that produces the line at the top of every page (p. '\headline')
\heartsuit heart suit symbol: $\heartsuit$ (p. '\heartsuit')
*\hfil produce infinitely stretchable horizontal glue (p. '\hfil')
*\hfill produce horizontal glue even more infinitely stretchable than that produced by \hfil (p. '\hfill')
*\hfilneg produce infinitely negative stretchable horizontal glue (p. '\hfilneg')
*\hfuzz space threshold for reporting overfull hboxes, by default 0.1 pt (p. '\hfuzz')
\hglue produce horizontal glue that doesn't disappear at line breaks (p. '\hglue')
\hidewidth ignore width of an entry in an alignment, so that it extends out from its box in the direction of the \hidewidth (p. '\hidewidth')
*\hoffset page offset relative to one inch from the paper's left edge (p. '\hoffset')
*\holdinginserts if positive, do not remove insertions from the current page (p. '\holdinginserts')
\hom homology function: hom (p. '\hom')
\hookleftarrow relation: $\hookleftarrow$ (p. '\hookleftarrow')
\hookrightarrow relation: $\hookrightarrow$ (p. '\hookrightarrow')
\hphantom produce an invisible formula with zero height and depth but natural width (p. '\hphantom')
*\hrule produce a horizontal rule; legal only in vertical modes (p. '\hrule')
\hrulefill fill enclosing space with a horizontal rule (p. '\hrulefill')

*\hsize line length, by default 6.5 in (p. '\hsize')
*\hskip produce specified horizontal glue (p. '\hskip')
*\hss produce horizontal glue that is infinitely stretchable and infinitely shrinkable (p. '\hss')
*\ht the height of the box in a specified box register (p. '\ht')
*\hyphenation add specified words to the hyphenation exception dictionary (p. '\hyphenation')
*\hyphenchar the hyphenation character in a specified font (p. '\hyphenchar')
*\hyphenpenalty additional penalty for a line break at a hyphen, by default 50 (p. '\hyphenpenalty')
\i dotless letter 'ı' for use with accents (p. '\i')
\ialign start an \halign with the \tabskip glue zero and \everycr empty (p. '\ialign')
*\if test if two specified tokens have the same character code (p. '\@if')
*\ifcase expand case n for specified value n (p. '\@ifcase')
*\ifcat test if two specified tokens have the same category code (p. '\@ifcat')
*\ifdim test for a specified relationship between two specified dimensions (p. '\@ifdim')
*\ifeof test for being at the end of a specified file (p. '\@ifeof')
\iff if and only if relation: $\iff$ (p. '\iff')
*\iffalse test that is always false (p. '\@iffalse')
*\ifhbox test if a specified box register contains an hbox (p. '\@ifhbox')
*\ifhmode test if TEX is in a horizontal mode (p. '\@ifhmode')
*\ifinner test if TEX is in an internal mode (p. '\@ifinner')
*\ifmmode test if TEX is in a math mode (p. '\@ifmmode')
*\ifnum test for a specified relationship between two specified numbers (p. '\@ifnum')
*\ifodd test if a specified number is odd (p. '\@ifodd')
*\iftrue test that is always true (p. '\@iftrue')
*\ifvbox test if a specified box register contains a vbox (p. '\@ifvbox')
*\ifvmode test if TEX is in a vertical mode (p. '\@ifvmode')
*\ifvoid test if a specified box register is void (p. '\@ifvoid')
*\ifx test if two tokens are the same, or if two macros have the same top-level definition (p. '\@ifx')
*\ignorespaces ignore any following space tokens (p. '\ignorespaces')
\Im complex imaginary part symbol: $\Im$ (p. '\Im')
\imath dotless letter '$\imath$' for use with math accents (p. '\imath')
*\immediate perform the specified file operation without delay (p. '\immediate')
\in containment relation: $\in$ (p. '\in')

*\indent produce an empty box of width \parindent and enter horizontal mode (p. '\indent')

\inf inferior function: inf (p. '\inf')

\infty infinity symbol: ∞ (p. '\infty')

*\input begin to read from a specified file (p. '\input')

*\inputlineno the current line number of the current input file (p. '\inputlineno')

*\insert produce an insertion of a specified class (p. '\insert')

*\insertpenalties sum of penalties due to insertions (p. '\insertpenalties')

\int integral symbol: $\int$ (p. '\int')

*\interlinepenalty additional penalty for a page break between lines of a paragraph, by default 0 (p. '\interlinepenalty')

\iota math Greek letter ι (p. '\iota')

\it use italics, i.e., do \tenit\fam=\itfam (p. '\it')

\item begin a paragraph with hanging indentation of \parindent and preceded by a specified label (p. '\item')

\itemitem like \item, but with indentation of 2\parindent (p. '\itemitem')

\itfam italic family for math (p. '\itfam')

\j dotless letter 'ȷ', for use with accents (p. '\j')

\jmath dotless letter '$\jmath$' for use with math accents (p. '\jmath')

*\jobname base name of the file with which TEX was invoked (p. '\jobname')

\jot unit of measure for opening up displays (p. '\jot')

\kappa math Greek letter κ (p. '\kappa')

\ker kernel function: ker (p. '\ker')

*\kern produce a specified amount of space at which a break is not allowed (p. '\kern')

\l Polish letter: ł (p. '\l')

\L Polish letter: Ł (p. '\L')

\lambda math Greek letter λ (p. '\lambda')

\Lambda math Greek letter Λ (p. '\Lambda')

\land logical "and" operator: $\wedge$ (p. '\land')

\langle left angle delimiter: $\langle$ (p. '\langle')

*\language the current set of hyphenation patterns (p. '\language')

*\lastbox retrieve and remove the last item from the current list, if it's a box (p. '\lastbox')

*\lastkern retrieve the last item from the current list, if it's a kern (p. '\lastkern')

*\lastpenalty retrieve the last item from the current list, if it's a penalty (p. '\lastpenalty')

*\lastskip retrieve the last item from the current list, if it's glue (p. '\lastskip')
\lbrace left brace delimiter: { (p. '\lbrace')
\lbrack left bracket delimiter: [(p. '\lbrack')
*\lccode the character code for the lowercase form of a letter (p. '\lccode')
\lceil left ceiling delimiter: ⌈ (p. '\lceil')
\ldotp dot on baseline as punctuation: . (p. '\ldotp')
\ldots dots on baseline for math: ... (p. '\ldots')
\le less than or equal relation: ≤ (p. '\le')
*\leaders fill a specified horizontal or vertical space by repeating a specified box or rule (p. '\leaders')
*\left produce the specified delimiter, sizing it to cover the following subformula ended by \right (p. '\left')
\leftarrow relation: ← (p. '\leftarrow')
\Leftarrow relation: ⇐ (p. '\Leftarrow')
\leftarrowfill fill enclosing hbox with a \leftarrow: ←——— (p. '\leftarrowfill')
\leftharpoondown relation: ↽ (p. '\leftharpoondown')
\leftharpoonup relation: ↼ (p. '\leftharpoonup')
*\lefthyphenmin size of the smallest word fragment TEX allows before a hyphen at the beginning of a word, by default 2 (p. '\lefthyphenmin')
\leftline produce line with its text pushed to left margin (p. '\leftline')
\leftrightarrow relation: ↔ (p. '\leftrightarrow')
\Leftrightarrow relation: ⇔ (p. '\Leftrightarrow')
*\leftskip glue TEX inserts at the left of each line (p. '\leftskip')
\leq equivalent to \le (p. '\leq')
\leqalignno produce specified multiline display with equation numbers on the left whose indicated parts are vertically aligned (p. '\leqalignno')
*\leqno put a specified equation number on the left of a display (p. '\leqno')
*\let define a control sequence to be the next token (p. '\let')
\lfloor left floor delimiter: ⌊ (p. '\lfloor')
\lg logarithm function: lg (p. '\lg')
\lgroup left group delimiter (the smallest size is shown here): ((p. '\lgroup')
\lim limit function: lim (p. '\lim')
\liminf inferior limit function: lim inf (p. '\liminf')

`*\limits` place superscript above and subscript below a large operator (p. '`\limits`')
`\limsup` superior limit function: lim sup (p. '`\limsup`')
`\line` produce a justified line of type (p. '`\line`')
`*\linepenalty` penalty for line breaking added to each line, by default 10 (p. '`\linepenalty`')
`*\lineskip` vertical glue from one baseline to the next if the lines are closer together than `\lineskiplimit`, by default 1 pt (p. '`\lineskip`')
`*\lineskiplimit` threshold for using `\lineskip` instead of `\baselineskip`, by default 0 pt (p. '`\lineskiplimit`')
`\ll` much less than relation: $\ll$ (p. '`\ll`')
`\llap` produce text (with no width) extending to the left of the current position (p. '`\llap`')
`\lmoustache` top half of a large brace: $\int$ (p. '`\lmoustache`')
`\ln` natural logarithm function: ln (p. '`\ln`')
`\lnot` logical "not" symbol: $\neg$ (p. '`\lnot`')
`\log` logarithm function: log (p. '`\log`')
`*\long` allow `\par` tokens in the argument(s) of the following definition (p. '`\long`')
`\longleftarrow` relation: $\longleftarrow$ (p. '`\longleftarrow`')
`\Longleftarrow` relation: $\Longleftarrow$ (p. '`\Longleftarrow`')
`\longleftrightarrow` relation: $\longleftrightarrow$ (p. '`\longleftrightarrow`')
`\Longleftrightarrow` relation: $\Longleftrightarrow$ (p. '`\Longleftrightarrow`')
`\longmapsto` relation: $\longmapsto$ (p. '`\longmapsto`')
`\longrightarrow` relation: $\longrightarrow$ (p. '`\longrightarrow`')
`\Longrightarrow` relation: $\Longrightarrow$ (p. '`\Longrightarrow`')
`\loop` start a loop to be ended by `\repeat` (p. '`\loop`')
`*\looseness` difference between the number of lines you want a paragraph to be relative to the optimal number (p. '`\looseness`')
`\lor` logical "or" operator: $\vee$ (p. '`\lor`')
`*\lower` lower a specified box by a specified amount (p. '`\lower`')
`*\lowercase` convert uppercase letters in the specified text to lowercase (p. '`\lowercase`')
`\lq` left quote character for text: ‘ (p. '`\lq`')
`*\mag` 1000 times the ratio for enlarging all dimensions (p. '`\mag`')
`\magnification` like `\mag`, but don't enlarge the page size (p. '`\magnification`')
`\magstep` $1000 \cdot 1.2^n$ for a specified n (p. '`\magstep`')
`\magstephalf` $1000 \cdot \sqrt{1.2}$ (p. '`\magstephalf`')
`\mapsto` relation: $\mapsto$ (p. '`\mapsto`')
`*\mark` produce a mark item with a specified text (p. '`\mark`')

*\mathaccent put specified math accent over the next character (p. '\mathaccent')
*\mathbin space a specified subformula as a binary operator (p. '\mathbin')
*\mathchar produce the math character with the specified mathcode (p. '\mathchar')
*\mathchardef define a specified control sequence to be a mathcode, a number between 0 and $2^{15} - 1$ (p. '\mathchardef')
*\mathchoice select one of four specified math subformulas depending on the current style (p. '\mathchoice')
*\mathclose space a specified subformula as a closing delimiter (p. '\mathclose')
*\mathcode the mathcode of a specified character (p. '\mathcode')
*\mathinner space a specified subformula as an inner formula, e.g., a fraction (p. '\mathinner')
*\mathop space a specified subformula as a large math operator (p. '\mathop')
*\mathopen space a specified subformula as an opening delimiter (p. '\mathopen')
*\mathord space a specified subformula as an ordinary character (p. '\mathord')
\mathpalette produce a \mathchoice which expands a specified control sequence depending on the current style (p. '\mathpalette')
*\mathpunct space a specified subformula as punctuation (p. '\mathpunct')
*\mathrel space a specified subformula as a relation (p. '\mathrel')
\mathstrut produce an invisible box with the height and depth of a left parenthesis and no width (p. '\mathstrut')
*\mathsurround space TEX kerns before and after math in text (p. '\mathsurround')
\matrix produce a specified matrix (p. '\matrix')
\max maximum function: max (p. '\max')
*\maxdeadcycles value of \deadcycles at which TEX complains, and then uses its own output routine, by default 25 (p. '\maxdeadcycles')
*\maxdepth maximum depth of the bottom box on a page, by default 4 pt (p. '\maxdepth')
\maxdimen largest dimension acceptable to TEX (p. '\maxdimen')
*\meaning produce the human-understandable meaning of a specified token as characters (p. '\meaning')
\medbreak indicate desirable page break with \penalty-100 and produce \medskipamount glue (p. '\medbreak')
*\medmuskip glue for a medium math space, by default 4 mu plus 2 mu minus 4 mu (p. '\medmuskip')

`\medskip` produce `\medskipamount` glue (p. '`\medskip`')

`\medskipamount` glue for a medium vertical skip, by default 6 ptplus 2 pt minus 2 pt (p. '`\medskipamount`')

`*\message` show expansion of the specified text on the terminal (p. '`\message`')

`\mid` middle relation: $\mid$ (p. '`\mid`')

`\midinsert` produce the specified text at the current position if possible, otherwise at the top of the next page (p. '`\midinsert`')

`\min` minimum function: min (p. '`\min`')

`\mit` use math italics, i.e., do `\fam=1` (p. '`\mit`')

`*\mkern` produce a specified kern in units of `mu` for math (p. '`\mkern`')

`\models` models relation: $\models$ (p. '`\models`')

`*\month` current month, as a number (p. '`\month`')

`*\moveleft` move a specified box left by a specified space; legal only in vertical modes (p. '`\moveleft`')

`*\moveright` move a specified box right by a specified space; legal only in vertical modes (p. '`\moveright`')

`\mp` minus and plus operator: $\mp$ (p. '`\mp`')

`*\mskip` produce specified glue in units of `mu` for math (p. '`\mskip`')

`\mu` math Greek letter μ (p. '`\mu`')

`*\multiply` multiply a specified `\count` register by a specified integer (p. '`\multiply`')

`\multispan` make next alignment entry span a specified number of columns (or rows) (p. '`\multispan`')

`*\muskip` the specified muglue register (p. '`\muskip`')

`*\muskipdef` define a specified control sequence to be a number corresponding to a `\muskip` register (p. '`\muskipdef`')

`\nabla` backwards difference symbol: ∇ (p. '`\nabla`')

`\narrower` make both left and right margins narrower by `\parindent` (p. '`\narrower`')

`\natural` natural symbol for music: $\natural$ (p. '`\natural`')

`\nearrow` northeast arrow relation: $\nearrow$ (p. '`\nearrow`')

`\ne` not equal relation: $\neq$ (p. '`\ne`')

`\neg` logical "not" symbol: $\neg$ (p. '`\neg`')

`\negthinspace` kern $-1/6$ em (p. '`\negthinspace`')

`\neq` not equal relation: $\neq$ (p. '`\neq`')

`\newbox` reserve and name a `\box` register (p. '`\@newbox`')

`\newcount` reserve and name a `\count` register (p. '`\@newcount`')

`\newdimen` reserve and name a `\dimen` register (p. '`\@newdimen`')

`\newfam` reserve and name a math family (p. '`\@newfam`')

`\newhelp` name a specified help message (p. '`\@newhelp`')

`\newif` define a new conditional with the specified name (p. '`\@newif`')

\newinsert name an insertion class, and reserve a corresponding \box, \count, \dimen, and \skip registers (p. '\@newinsert')
\newlanguage reserve and name a \language (p. '\@newlanguage')
*\newlinechar end-of-line character for \write, etc. (p. '\newlinechar')
\newmuskip reserve and name a \muskip register (p. '\@newmuskip')
\newread reserve and name an input stream (p. '\@newread')
\newskip reserve and name a \skip register (p. '\@newskip')
\newtoks reserve and name a \toks register (p. '\@newtoks')
\newwrite reserve and name an output stream (p. '\@newwrite')
\ni "reverse in" relation: ∋ (p. '\ni')
*\noalign insert material between rows (or columns) of an alignment (p. '\noalign')
*\noboundary inhibit ligatures or kerns involving the current font's boundarychar (p. '\noboundary')
\nobreak do \penalty10000, i.e., inhibit a line or page break (p. 'hnobreak', p. 'vnobreak')
*\noexpand suppress expansion of the next token (p. '\noexpand')
*\noindent enter horizontal mode without indenting the paragraph (p. '\noindent')
\nointerlineskip inhibit interline glue before the next line (p. '\nointerlineskip')
*\nolimits place superscript and subscript after large operators (p. '\nolimits')
\nonfrenchspacing make interword spacing depend on punctuation (p. '\nonfrenchspacing')
*\nonscript inhibit any following glue or kern when in script and scriptscript styles (p. '\nonscript')
*\nonstopmode don't stop at errors, even those about missing files (p. '\nonstopmode')
\nopagenumbers inhibit printing of page numbers, i.e., do \footline = \hfil (p. '\nopagenumbers')
\normalbaselines set \baselineskip, \lineskip, and \lineskiplimit to the normal values for the current type size (p. '\normalbaselines')
\normalbaselineskip value of \baselineskip for the current type size (p. '\normalbaselineskip')
\normalbottom make the bottom margin be the same from page to page (p. '\normalbottom')
\normallineskip value of \lineskip for the current type size (p. '\normallineskip')
\normallineskiplimit value of \lineskiplimit for the current type size (p. '\normallineskiplimit')
\not a slash with zero width for constructing negations of math relations, as in ≠ (p. '\not')

`\notin` noninclusion relation: $\notin$ (p. '`\notin`')
`\nu` math Greek letter ν (p. '`\nu`')
`\null` expands to an empty hbox (p. '`\null`')
`*\nulldelimiterspace` space produced by a null delimiter, by default 1.2 pt (p. '`\nulldelimiterspace`')
`*\nullfont` primitive font with no characters in it (p. '`\nullfont`')
`*\number` produce a specified number as characters (p. '`\number`')
`\nwarrow` northwest arrow relation: $\nwarrow$ (p. '`\nwarrow`')
`\o` Danish letter: ø (p. '`\o`')
`\O` Danish letter: Ø (p. '`\O`')
`\obeylines` make each end-of-line in the input file equivalent to `\par` (p. '`\obeylines`')
`\obeyspaces` produce space in the output for each space character in the input (p. '`\obeyspaces`')
`\odot` centered dot operation: $\odot$ (p. '`\odot`')
`\oe` œ ligature (p. '`\oe`')
`\OE` Œ ligature (p. '`\OE`')
`\offinterlineskip` inhibit interline glue from now on (p. '`\offinterlineskip`')
`\oint` contour integral operator: $\oint$ (p. '`\oint`')
`\oldstyle` use old style digits: 1234567890 (p. '`\oldstyle`')
`\omega` math Greek letter ω (p. '`\omega`')
`\Omega` math Greek letter Ω (p. '`\Omega`')
`\ominus` circled minus operator: $\ominus$ (p. '`\ominus`')
`*\omit` skip a column's (or row's) template in an alignment (p. '`\omit`')
`*\openin` prepare a specified input stream to read from a file (p. '`\openin`')
`*\openout` prepare a specified output stream to write to a file (p. '`\openout`')
`\openup` increase `\baselineskip`, `\lineskip`, and `\lineskiplimit` by a specified amount (p. '`\openup`')
`\oplus` circled plus operator: $\oplus$ (p. '`\oplus`')
`*\or` separate the cases of an `\ifcase` (p. '`\@or`')
`\oslash` circled slash operator: $\oslash$ (p. '`\oslash`')
`\otimes` circled times operator: $\otimes$ (p. '`\otimes`')
`*\outer` make the following macro definition illegal in contexts in which tokens are absorbed at high speed (p. '`\outer`')
`*\output` token list TEX expands when it finds a page break (p. '`\output`')
`*\outputpenalty` if the page break occurred at a penalty, the value of that penalty; otherwise zero (p. '`\outputpenalty`')
`*\over` produce a fraction with a bar of default thickness (p. '`\over`')

`\overbrace` produce a brace covering the top of a formula, as in $\overbrace{h+w}$ (p. '`\overbrace`')

*`\overfullrule` width of the rule appended to an overfull box (p. '`\overfullrule`')

`\overleftarrow` produce a left arrow covering the top of a formula, as in $\overleftarrow{r+a}$ (p. '`\overleftarrow`')

*`\overline` produce a line covering the top of a formula, as in $\overline{2b}$ (p. '`\overline`')

`\overrightarrow` produce a right arrow covering the top of a formula, as in $\overrightarrow{i+t}$ (p. '`\overrightarrow`')

*`\overwithdelims` produce a fraction with a bar of the default thickness and surrounded by specified delimiters (p. '`\overwithdelims`')

`\owns` owns relation: $\ni$ (p. '`\owns`')

`\P` paragraph character for text: ¶ (p. '`\P`')

*`\pagedepth` TEX sets this to the current depth of the current page (p. '`\pagedepth`')

*`\pagefilllstretch` TEX sets this to the amount of `filll` stretch on the current page (p. '`\pagefilllstretch`')

*`\pagefillstretch` TEX sets this to the amount of `fill` stretch on the current page (p. '`\pagefillstretch`')

*`\pagefilstretch` TEX sets this to the amount of `fil` stretch on the current page (p. '`\pagefilstretch`')

*`\pagegoal` TEX sets this to the desired height for the current page (i.e., `\vsize` when the first box is put on the page) (p. '`\pagegoal`')

`\pageinsert` produce the specified text on the following page, and use up the full page (p. '`\pageinsert`')

`\pageno` the register `\count0`, which contains the (possibly negative) page number (p. '`\pageno`')

*`\pageshrink` TEX sets this to the total amount of shrinkability on the current page (p. '`\pageshrink`')

*`\pagestretch` TEX sets this to the total amount of stretchability on the current page (p. '`\pagestretch`')

*`\pagetotal` TEX sets this to the natural height of the current page (p. '`\pagetotal`')

*`\par` finish paragraph and terminate horizontal mode (p. '`\@par`')

`\parallel` parallel relation: $\parallel$ (p. '`\parallel`')

*`\parfillskip` horizontal glue TEX inserts at the end of a paragraph (p. '`\parfillskip`')

*`\parindent` horizontal space TEX inserts at the start of a paragraph (p. '`\parindent`')

*`\parshape` specify the width and length of each line in the next paragraph (p. '`\parshape`')

*`\parskip` vertical glue TEX inserts before a paragraph (p. '`\parskip`')

`\partial` partial derivative symbol: ∂ (p. '`\partial`')

`*\pausing` if positive, stop after reading each line of input for a possible replacement (p. '`\pausing`')

`*\penalty` produce penalty (or bonus, if negative) for breaking line or page here (p. '`hpenalty`', p. '`vpenalty`')

`\perp` perpendicular relation: $\perp$ (p. '`\perp`')

`\phantom` produce an invisible formula with the dimensions of a specified subformula (p. '`\phantom`')

`\phi` math Greek letter ϕ (p. '`\phi`')

`\Phi` math Greek letter Φ (p. '`\Phi`')

`\pi` math Greek letter π (p. '`\pi`')

`\Pi` math Greek letter Π (p. '`\Pi`')

`\plainoutput` plain TEX's `\output` routine (p. '`\plainoutput`')

`\pm` plus and minus operator: $\pm$ (p. '`\pm`')

`\pmatrix` produce a parenthesized matrix (p. '`\pmatrix`')

`\pmod` parenthesized modulus notation to put at the end of a formula, as in $x \equiv y + 1 \pmod 2$ (p. '`\pmod`')

`*\postdisplaypenalty` additional penalty for a line break just after a display, by default 0 (p. '`\postdisplaypenalty`')

`\Pr` probability function: Pr (p. '`\Pr`')

`\prec` precedes relation: $\prec$ (p. '`\prec`')

`\preceq` precedes or equals relation: $\preceq$ (p. '`\preceq`')

`*\predisplaypenalty` additional penalty for a line break just before a display, by default 0 (p. '`\predisplaypenalty`')

`*\predisplaysize` TEX sets this to the width of the line preceding a display (p. '`\predisplaysize`')

`*\pretolerance` badness tolerance for line breaks without hyphenation, by default 100 (p. '`\pretolerance`')

`*\prevdepth` depth of the last nonrule box on the current vertical list (p. '`\prevdepth`')

`*\prevgraf` TEX sets this to the number of lines in the paragraph so far (in horizontal mode) or in the previous paragraph (in vertical mode) (p. '`\prevgraf`')

`\prime` prime math symbol, as in r' (p. '`\prime`')

`\proclaim` begin a theorem, lemma, hypothesis, ... (p. '`\@proclaim`')

`\prod` large product operator: $\prod$ (p. '`\prod`')

`\propto` proportional to relation: $\propto$ (p. '`\propto`')

`\psi` math Greek letter ψ (p. '`\psi`')

`\Psi` math Greek letter Ψ (p. '`\Psi`')

`\qquad` produce horizontal glue with width 2 em (p. '`\qquad`')

`\quad` produce horizontal glue with width 1 em (p. '`\quad`')

`*\radical` produce a specified radical symbol (p. '`\radical`')

`\raggedbottom` allow the bottom margin to vary from page to page (p. '`\raggedbottom`')

`\raggedright` allow the right margin to vary from line to line (p. '`\raggedright`')

*`\raise` raise a specified box by a specified amount (p. '`\raise`')

`\rangle` right angle delimiter: ⟩ (p. '`\rangle`')

`\rbrace` right brace delimiter: } (p. '`\rbrace`')

`\rbrack` right bracket delimiter:] (p. '`\rbrack`')

`\rceil` right ceiling delimiter: ⌉ (p. '`\rceil`')

`\Re` complex real part symbol: ℜ (p. '`\Re`')

*`\read` read a line from a specified input stream (p. '`\read`')

*`\relax` do nothing (p. '`\relax`')

*`\relpenalty` additional penalty for breaking after a relation, by default 500 (p. '`\relpenalty`')

`\repeat` end a loop started with `\loop` (p. '`\@repeat`')

`\rfloor` right floor delimiter: ⌋ (p. '`\rfloor`')

`\rgroup` right group delimiter (the smallest size is shown here): ⎭ (p. '`\rgroup`')

`\rho` math Greek letter ρ (p. '`\rho`')

*`\right` produce the specified delimiter at the right end of a subformula started with `\left` (p. '`\right`')

`\rightarrow` relation: $\rightarrow$ (p. '`\rightarrow`')

`\Rightarrow` relation: $\Rightarrow$ (p. '`\Rightarrow`')

`\rightarrowfill` fill enclosing hbox with a `\rightarrow`: $\longrightarrow$ (p. '`\rightarrowfill`')

`\rightharpoondown` relation: $\rightharpoondown$ (p. '`\rightharpoondown`')

`\rightharpoonup` relation: $\rightharpoonup$ (p. '`\rightharpoonup`')

`\rightleftharpoons` relation: $\rightleftharpoons$ (p. '`\rightleftharpoons`')

`\rightline` produce line with its text pushed to right margin (p. '`\rightline`')

*`\rightskip` glue TEX inserts at the right of each line (p. '`\rightskip`')

*`\righthyphenmin` size of the smallest word fragment TEX allows after a hyphen at the end of a word, by default 3 (p. '`\righthyphenmin`')

`\rlap` produce text (with no width) extending to the right of the current position (p. '`\rlap`')

`\rm` use roman type, i.e., do `\tenrm\fam=0` (p. '`\rm`')

`\rmoustache` bottom half of a large brace: ⎱ (p. '`\rmoustache`')

`\romannumeral` produce the lowercase roman numeral representation of a specified number as characters (p. '`\romannumeral`')

`\root` produce a specified root of a specified subformula, as in $\sqrt[3]{2}$ (p. '`\root`')

`\rq` right quote character for text: ' (p. '`\rq`')

`\S` section character for text: § (p. '`\S`')

`\sb` implicit subscript character (p. ‘`\sb`’)

`*\scriptfont` the script style font in a specified math family (p. ‘`\scriptfont`’)

`*\scriptscriptfont` the scriptscript style font in a specified math family (p. ‘`\scriptscriptfont`’)

`*\scriptscriptstyle` use scriptscriptstyle size in a formula (p. ‘`\scriptscriptstyle`’)

`*\scriptspace` additional space TEX kerns after a subscript or superscript, by default 0.5 pt (p. ‘`\scriptspace`’)

`*\scriptstyle` use scriptstyle size in a formula (p. ‘`\scriptstyle`’)

`*\scrollmode` don’t stop at most errors, but do stop at errors about missing files (p. ‘`\scrollmode`’)

`\searrow` southeast arrow relation: $\searrow$ (p. ‘`\searrow`’)

`\sec` secant function: sec (p. ‘`\sec`’)

`*\setbox` define a specified box register to be a box (p. ‘`\setbox`’)

`*\setlanguage` change to a specified set of hyphenation rules, but don’t change `\language` (p. ‘`\setlanguage`’)

`\setminus` set difference operator: $\setminus$ (p. ‘`\setminus`’)

`\settabs` define the tabs for a tabbing alignment (p. ‘`\settabs`’)

`\sevenbf` use 7-point bold font, `cmbx7` (p. ‘`\sevenbf`’)

`\seveni` use 7-point math italic font, `cmmi5` (p. ‘`\seveni`’)

`\sevenrm` use 7-point roman font, `cmr7` (p. ‘`\sevenrm`’)

`\sevensy` use 7-point symbol font, `cmsy7` (p. ‘`\sevensy`’)

`*\sfcode` the space factor code of a specified character (p. ‘`\sfcode`’)

`\sharp` sharp symbol for music: $\sharp$ (p. ‘`\sharp`’)

`*\shipout` output a box to the `.dvi` file (p. ‘`\shipout`’)

`*\show` show, in the log and on the terminal, the meaning of a specified token (p. ‘`\show`’)

`*\showbox` display the contents of a specified box register (p. ‘`\showbox`’)

`*\showboxbreadth` maximum number of items shown on each nesting level, by default 5 (p. ‘`\showboxbreadth`’)

`*\showboxdepth` maximum nesting level shown, by default 3 (p. ‘`\showboxdepth`’)

`\showhyphens` show, in the log and on the terminal, hyphenations in the specified text (p. ‘`\showhyphens`’)

`*\showlists` display all lists being worked on (p. ‘`\showlists`’)

`*\showthe` show, in the log and on the terminal, what `\the` would produce (p. ‘`\showthe`’)

`\sigma` math Greek letter σ (p. ‘`\sigma`’)

`\Sigma` math Greek letter Σ (p. ‘`\Sigma`’)

`\sim` similarity relation: $\sim$ (p. ‘`\sim`’)

`\simeq` similar or equal relation: $\simeq$ (p. ‘`\simeq`’)

`\sin` sine function: sin (p. '`\sin`')
`\sinh` hyperbolic sine function: sinh (p. '`\sinh`')
`\skew` shift a specified accent by a specified amount on a specified accented character (p. '`\skew`')
*`\skewchar` character in a specified font used for positioning accents (p. '`\skewchar`')
*`\skip` the specified glue register (p. '`\skip`')
*`\skipdef` define a specified control sequence to be a number corresponding to a `\skip` register (p. '`\skipdef`')
`\sl` use slanted type, i.e., do `\tensl\fam=\slfam` (p. '`\sl`')
`\slash` / character that allows a line break (p. '`\slash`')
`\slfam` slanted family for math (p. '`\slfam`')
`\smallbreak` indicate somewhat desirable page break with `\penalty-50` and produce `\smallskipamount` glue (p. '`\smallbreak`')
`\smallint` small integral symbol: $\smallint$ (p. '`\smallint`')
`\smallskip` produce `\smallskipamount` glue (p. '`\smallskip`')
`\smallskipamount` glue for a small vertical skip, by default 3 pt plus 1 pt minus 1 pt (p. '`\smallskipamount`')
`\smash` produce formula with zero height and depth (p. '`\smash`')
`\smile` smile relation: $\smile$ (p. '`\smile`')
`\sp` implicit superscript character (p. '`\sp`')
`\space` produce normal interword glue (p. '`\space`')
*`\spacefactor` modifies stretch and shrink of interword glue if not 1000 (p. '`\spacefactor`')
*`\spaceskip` if nonzero and `\spacefactor` < 2000, overrides the normal interword glue (p. '`\spaceskip`')
`\spadesuit` spade suit symbol: $\spadesuit$ (p. '`\spadesuit`')
*`\span` either combine entries in an alignment body or expand tokens in a preamble (p. '`\span`')
*`\special` write tokens to the `.dvi` file to be interpreted by a DVI-reading program (p. '`\special`')
*`\splitbotmark` last mark item in a box resulting from `\vsplit` (p. '`\splitbotmark`')
*`\splitfirstmark` first mark item in a box resulting from `\vsplit` (p. '`\splitfirstmark`')
*`\splitmaxdepth` maximum depth of a box resulting from `\vsplit` (p. '`\splitmaxdepth`')
*`\splittopskip` glue TEX inserts at the top of a box resulting from `\vsplit` (p. '`\splittopskip`')
`\sqcap` square cap operator: $\sqcap$ (p. '`\sqcap`')
`\sqcup` square cup operator: $\sqcup$ (p. '`\sqcup`')
`\sqrt` produce square root of a subformula, as in $\sqrt{2}$ (p. '`\sqrt`')
`\sqsubseteq` square subset or equal relation: $\sqsubseteq$ (p. '`\sqsubseteq`')

`\sqsupseteq` square superset or equal relation: $\sqsupseteq$ (p. '`\sqsupseteq`')
`\ss` German letter: ß (p. '`\ss`')
`\star` star operator: $\star$ (p. '`\star`')
`*\string` produce a specified token, most commonly a control sequence, as characters (p. '`\string`')
`\strut` box with zero width, but height and depth of a standard line, from baseline to baseline, in the current font (p. '`\strut`')
`\subset` subset relation: $\subset$ (p. '`\subset`')
`\subseteq` subset or equal relation: $\subseteq$ (p. '`\subseteq`')
`\succ` successor relation: $\succ$ (p. '`\succ`')
`\succeq` successor or equal relation: $\succeq$ (p. '`\succeq`')
`\sum` large summation operator: $\sum$ (p. '`\sum`')
`\sup` superior function: sup (p. '`\sup`')
`\supereject` force a page break, and output all insertions (p. '`\supereject`')
`\supset` superset relation: $\supset$ (p. '`\supset`')
`\supseteq` superset or equal relation: $\supseteq$ (p. '`\supseteq`')
`\surd` surd symbol: $\surd$ (p. '`\surd`')
`\swarrow` southwest arrow relation: $\swarrow$ (p. '`\swarrow`')
`\t` tie-after accent for text, as in u͡u (p. '`\t`')
`\tabalign` equivalent to `\+`, except it's not `\outer` (p. '`\tabalign`')
`*\tabskip` glue between columns (or rows) of an alignment (p. '`\tabskip`')
`\tan` tangent function: tan (p. '`\tan`')
`\tanh` hyperbolic tangent function: tanh (p. '`\tanh`')
`\tau` math Greek letter τ (p. '`\tau`')
`\tenbf` use 10-point bold font, `cmbx10` (p. '`\tenbf`')
`\tenex` use 10-point math extension font, `cmex10` (p. '`\tenex`')
`\teni` use 10-point math italic font, `cmmi10` (p. '`\teni`')
`\tenit` use 10-point text italic font, `cmti10` (p. '`\tenit`')
`\tenrm` use 10-point roman text font, `cmr10` (p. '`\tenrm`')
`\tensl` use 10-point slanted roman font, `cmsl10` (p. '`\tensl`')
`\tensy` use 10-point math symbol font, `cmsy10` (p. '`\tensy`')
`\tentt` use 10-point typewriter font, `cmtt10` (p. '`\tentt`')
`\TeX` produce the TEX logo (p. '`\TeX`')
`*\textfont` the text style font in a specified math family (p. '`\textfont`')
`\textindent` like `\item`, but doesn't do hanging indentation (p. '`\textindent`')
`*\textstyle` use textstyle size in a formula (p. '`\textstyle`')
`*\the` give the value of a specified token (p. '`\the`')
`\theta` math Greek letter θ (p. '`\theta`')

\Theta math Greek letter Θ (p. '\Theta')
*\thickmuskip glue for a thick math space, by default 5 mu plus 5 mu (p. '\thickmuskip')
*\thinmuskip glue for a thin math space, by default 3 mu (p. '\thinmuskip')
\thinspace kern 1/6 em (p. '\thinspace')
\tilde tilde accent for math, as in $\tilde{x}$ (p. '\tilde')
*\time the time of day, in minutes since midnight (p. '\time')
\times times operator: × (p. '\times')
*\toks the specified token register (p. '\toks')
*\toksdef define a specified control sequence to be a number corresponding to a \toks register (p. '\toksdef')
*\tolerance badness tolerance for line breaks with hyphenation (p. '\tolerance')
\to mapping relation: → (p. '\to')
\top lattice top symbol: ⊤ (p. '\top')
\topglue produce specified vertical glue at the top of a page (p. '\topglue')
\topinsert produce the specified text at top of a page (p. '\topinsert')
*\topmark \botmark before the current page was boxed (p. '\topmark')
*\topskip glue between the headline and the first line of text on a page, by default 10 pt (p. '\topskip')
\tracingall turn on maximal tracing (p. '\tracingall')
*\tracingcommands display execution of commands (p. '\tracingcommands')
*\tracinglostchars display characters that are asked for, but not defined (p. '\tracinglostchars')
*\tracingmacros display macro expansions (p. '\tracingmacros')
*\tracingonline show diagnostic output on the terminal as well as in the log file (p. '\tracingonline')
*\tracingoutput display contents of shipped-out boxes (p. '\tracingoutput')
*\tracingpages display page break calculations (p. '\tracingpages')
*\tracingparagraphs display line break calculations (p. '\tracingparagraphs')
*\tracingrestores display values restored at the end of a group (p. '\tracingrestores')
*\tracingstats display memory usage statistics (p. '\tracingstats')
\triangle triangle symbol: △ (p. '\triangle')
\triangleleft left triangle operator: ◁ (p. '\triangleleft')
\triangleright right triangle operator: ▷ (p. '\triangleright')
\tt use typewriter type, i.e., do \tentt\fam=\ttfam (p. '\tt')
\ttfam typewriter family for math (p. '\ttfam')
\ttraggedright use typewriter type and allow right margins of paragraphs to vary from line to line (p. '\ttraggedright')

`\u` breve accent for text, as in ŭ (p. '`\u`')
*`\uccode` the character code for the uppercase form of a letter (p. '`\uccode`')
*`\uchyph` if positive, consider hyphenating words that start with a capital letter (p. '`\uchyph`')
`\underbar` underline the specified text without avoiding any descenders, as in fog (p. '`\underbar`')
`\underbrace` produce a brace covering the bottom of a formula, as in $\underbrace{x+x}$ (p. '`\underbrace`')
*`\underline` underline a math formula below the descenders, as in $\underline{x+y}$ (p. '`\underline`')
*`\unhbox` append the contents of the box in a specified box register to the current list, and void the register; legal only in horizontal modes (p. '`\unhbox`')
*`\unhcopy` like `\unhbox`, but doesn't void the register (p. '`\unhcopy`')
*`\unkern` if the last item on the current list is a kern, remove it (p. '`\unkern`')
*`\unpenalty` if the last item on the current list is a penalty, remove it (p. '`\unpenalty`')
*`\unskip` if the last item on the current list is glue, remove it (p. '`\unskip`')
*`\unvbox` append the contents of the box in a specified box register to the current list, and void the register; legal only in vertical modes (p. '`\unvbox`')
*`\unvcopy` like `\unvbox`, but doesn't void the register (p. '`\unvcopy`')
`\uparrow` relation: $\uparrow$ (p. '`\uparrow`')
`\Uparrow` relation: $\Uparrow$ (p. '`\Uparrow`')
`\upbracefill` fill enclosing hbox with an upwards facing brace: $\overbrace{\qquad}$ (p. '`\upbracefill`')
`\updownarrow` relation: $\updownarrow$ (p. '`\updownarrow`')
`\Updownarrow` relation: $\Updownarrow$ (p. '`\Updownarrow`')
`\uplus` cupped plus operator: $\uplus$ (p. '`\uplus`')
*`\uppercase` convert lowercase letters in the specified text to uppercase (p. '`\uppercase`')
`\upsilon` math Greek letter υ (p. '`\upsilon`')
`\Upsilon` math Greek letter Υ (p. '`\Upsilon`')
`\v` check accent for text, as in ŏ (p. '`\v`')
*`\vadjust` produce vertical mode material after the current line (p. '`\vadjust`')
*`\valign` align text in rows (p. '`\valign`')
`\varepsilon` variant math Greek letter ε (p. '`\varepsilon`')
`\varphi` variant math Greek letter φ (p. '`\varphi`')
`\varpi` variant math Greek letter ϖ (p. '`\varpi`')

\varrho variant math Greek letter ϱ (p. '\varrho')
\varsigma variant Greek letter ς (p. '\varsigma')
\vartheta variant math Greek letter ϑ (p. '\vartheta')
*\vbadness badness threshold for reporting underfull or overfull vboxes, by default 1000 (p. '\vbadness')
*\vbox produce a vbox whose baseline is that of the bottom box enclosed (p. '\vbox')
*\vcenter center the specified text on the math axis (p. '\vcenter')
\vdash left turnstile symbol: $\vdash$ (p. '\vdash')
\vdots vertical dots for math: $\vdots$ (p. '\vdots')
\vec vector accent for math, as in $\vec{x}$ (p. '\vec')
\vee logical "or" operator: $\vee$ (p. '\vee')
\vert bar relation: $|$ (p. '\vert')
\Vert double bar relation: $\|$ (p. '\Vert')
*\vfil produce infinitely stretchable vertical glue (p. '\vfil')
*\vfill produce even more infinitely stretchable vertical glue than that produced by \vfil (p. '\vfill')
*\vfilneg produce infinitely negative stretchable vertical glue (p. '\vfilneg')
\vfootnote produce a specified footnote with a specified reference mark, but don't produce the reference mark in the text (p. '\vfootnote')
*\vfuzz space threshold for reporting overfull vboxes, by default 0.1 pt (p. '\vfuzz')
\vglue produce specified vertical glue that doesn't disappear at page breaks (p. '\vglue')
*\voffset vertical offset relative to one inch from the paper's top edge (p. '\voffset')
\vphantom produce an invisible formula with zero width but natural height and depth (p. '\vphantom')
*\vrule produce a vertical rule; legal only in horizontal modes (p. '\vrule')
*\vsize page height, by default 8.9 in (p. '\vsize')
*\vskip produce specified vertical glue (p. '\vskip')
*\vsplit break the contents of a specified box register to the specified height (p. '\vsplit')
*\vss produce vertical glue that is infinitely stretchable and infinitely shrinkable (p. '\vss')
*\vtop produce a vbox whose baseline is that of the top box enclosed (p. '\vtop')
*\wd the width of the box in a specified box register (p. '\wd')
\wedge logical "and" operator: $\wedge$ (p. '\wedge')
\widehat math accent, as in $y + \widehat{z} + a$ (p. '\widehat')
\widetilde math accent $b + \widetilde{c} + d$ (p. '\widetilde')

`*\widowpenalty` penalty for a single line beginning a page, by default 150 (p. '`\widowpenalty`')

`\wlog` `\write` the specified token list in the log file (p. '`\wlog`')

`\wp` Weierstraß 'p' symbol: $\wp$ (p. '`\wp`')

`\wr` wreath product operator: $\wr$ (p. '`\wr`')

`*\write` write a line to a specified output stream (p. '`\write`')

`*\xdef` equivalent to `\global\edef`, i.e., globally define a macro, immediately expanding the replacement text (p. '`\xdef`')

`\xi` math Greek letter ξ (p. '`\xi`')

`\Xi` math Greek letter Ξ (p. '`\Xi`')

`*\xleaders` produce leaders with leftover space distributed equally between the leader boxes (p. '`\xleaders`')

`*\xspaceskip` if nonzero and `\spacefactor` $\geq$ 2000, overrides the normal interword glue (p. '`\xspaceskip`')

`*\year` the current year, as a number (p. '`\year`')

`\zeta` math Greek letter ζ (p. '`\zeta`')